Achieving Excellence In Execution

2005 NASA Project Management Challenge Conference

Vincent F. Amatulli – Application Solutions Group
David R. Dean – Lockheed Martin Corporation

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Discussion Agenda…

- The Basics of Project Management
  - ✓ Phases, Techniques & Knowledge Areas
- Factors of Excellence and Project Success
  - ✓ Technical, Analytic & People
- Establishing a High-Performance Culture
  - ✓ Responsibilities, Accountabilities & Value
- Creating a Lessons-Learned Environment
  - ✓ Issue Resolution for Knowledge Management
- Your Questions

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The Basics of Project Management

INITIATING	*PLANNING*	*EXECUTING*	*CONTROLLING*	*CLOSING*

*PMI

PROJECT COMMUNICATIONS

FEASIBILITY

- Develop a Project Statement
- Develop Project Goals and Outcomes
- Define Project Deliverables and Work Breakdown Structure
- Resource Requirements
- Assess Feasibility and Revise

PLANNING

- Assign Accountabilities
- Sequence and Schedule Work Breakdown Activities
- Schedule Resources
- Refine the Plan to Manage Risks
- Refine the Plan to Find Opportunities

IMPLEMENTATION

- Communicate and Initiate the Project
- Identify Milestones and Monitor the Project
- Troubleshoot Project Performance Problems
- Modify the Plan
- Closeout and Evaluate Project Success

CUSTOMER RELATIONSHIP MANAGEMENT

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PMI Knowledge Areas

Integration	Scope	Time	Cost	Quality	Human Resources	Commun-ications	Risk	Procure-ment
Project Plan Developm't	Initiation	Activity Definition	Resource Planning	Quality Planning	Organizat-ional Plng	Commun-ication Plng	Identify Risk	Procurement Planning
Project Plan Execution	Scope Planning	Activity Sequencing	Cost Estimating	Quality Assurance	Staff Acquisition	Information Distribution	Quantify Risk	Solicitation Planning
Overall Chg Control	Scope Definition	Activity Duration Estimation	Cost Budget	Quality Control	Team Developm't	Performance Reporting	Risk Response Developm't	Solicitation
	Scope Verification	Schedule Developm't	Cost Control			Administra-tive Closure	Risk Response Control	Source Selection
	Scope Chg Control	Schedule Control						Administer Contract
								Contract Closure

INITIATING	*PLANNING*	*EXECUTING*	*CONTROLLING*	*CLOSING*

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Project Management Excellence

Process Integrity	Designing processes to help the enterprise
Product Integrity	Delivering what the customer wants
Productivity Improvement	Working as efficiently as possible
Portfolio Management	Managing resources to expectations

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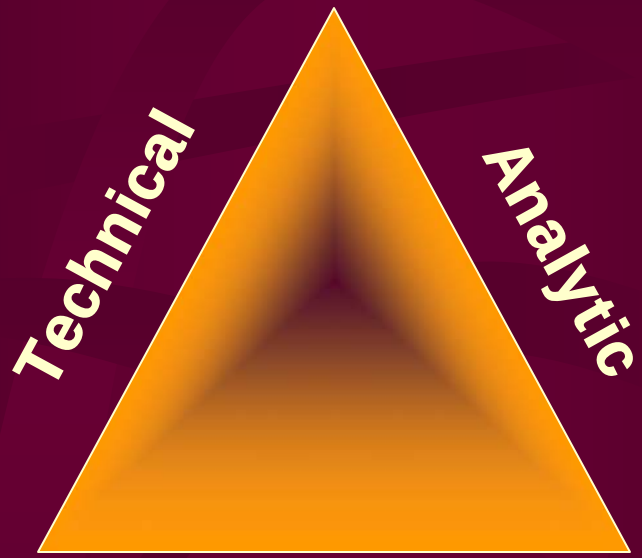
Successful Project Management



Performance Excellence

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Causes of Performance Problems

Individual Deficiencies

~ 1%

- Physical
- Mental
- Emotional

Skills/Knowledge Deficiencies

~ 14%

- What to do
- Why to do it
- How to do it
- When to do it

Environmental Deficiencies

~ 85%

- Expectations
- Consequences
- Feedback
- Task Interference

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Overcoming Performance Barriers

In an effective project performance environment, people:

- Know what is expected, recognize when to begin, and have the required tools to get the job done
- Have the appropriate knowledge and skills
- Respond as expected
- Are rewarded appropriately
- Are told how they are progressing

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Establishing A Lean Project Environment

- ***Customer Value*** is the Focus
- All resources are available to provide ***Value***
- Resources are integrated to provide ***Value***
- Nothing is waiting to be worked on
- Pursuit of Perfection

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Creating A High-Performance Project Culture

- Clear expectations and measures
  - ✓ Work Breakdown Structure
- Clear resource accountabilities
  - ✓ Resource assignments and scheduling
- Gain commitment and buy-in
  - ✓ Project communication & Customer Relationship Management
- Track and modify desired behaviors
  - ✓ Project performance management system

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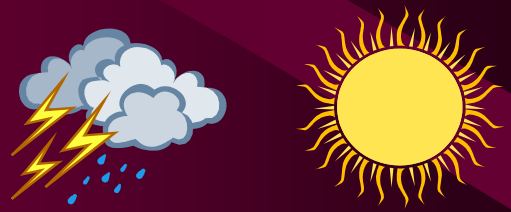
Project Performance System

Clear ***Signals***
Initiate Project Tasks

Logical Project
Task Design

Project ***Tasks Assigned***

Coaching and ***Feedback***
Guide Performance



Consequences Support
Desired Project Task Behavior

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Performance System Elements

Signals trigger the appropriate project behavior for the job or task.

Project Task Design is logical and correct for this situation. It is free from obstacles, and necessary resources are readily available.

Project Task accountabilities are clearly assigned. The people have the necessary skills, knowledge and mental or physical capabilities.

Consequences to the employee, team and program support the desired project behavior and correct/modify the undesired behavior.

Coaching and ***Feedback*** guide project task behavior; performance trends are identified.

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Resolving Project Issues

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Processes and Tools

Identify Situation

To Clarify Issues and Determine Priority

- ✓ Priority Analysis, Pareto Diagrams, Histograms, Value Stream Maps

Contain the Situation

Determine an Interim Action Plan

- ✓ Statistical Control Charts, Cause-Effect Diagrams, Customer Requirements

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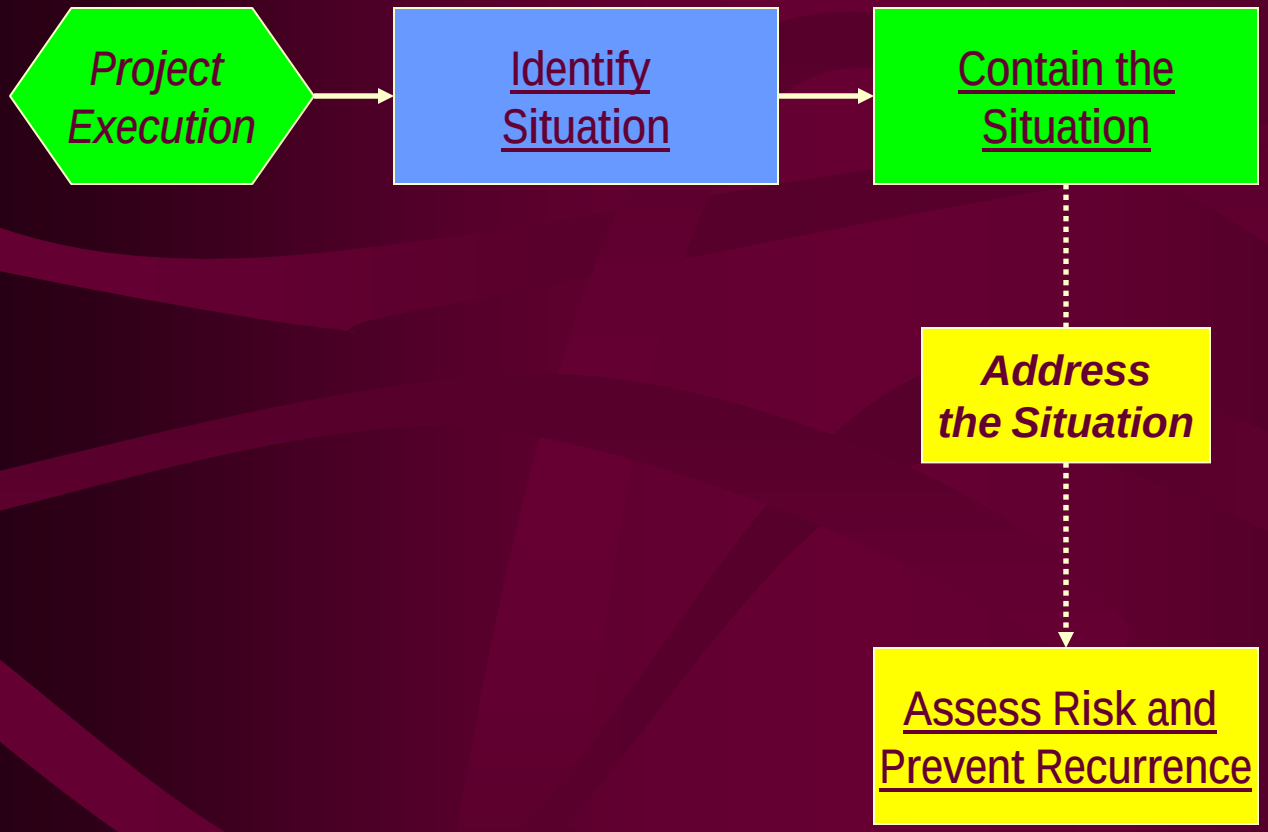
Resolving Project Issues



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Processes and Tools continued

Address the Situation - Implement Action

Assess Risk – Prevent Recurrence

Implement Preventive & Contingent Actions

- ✓ Problem Prevention – Risk Analysis, Design of Experiments, Failure Modes Effect Analysis (FMEA), Monte Carlo Analysis

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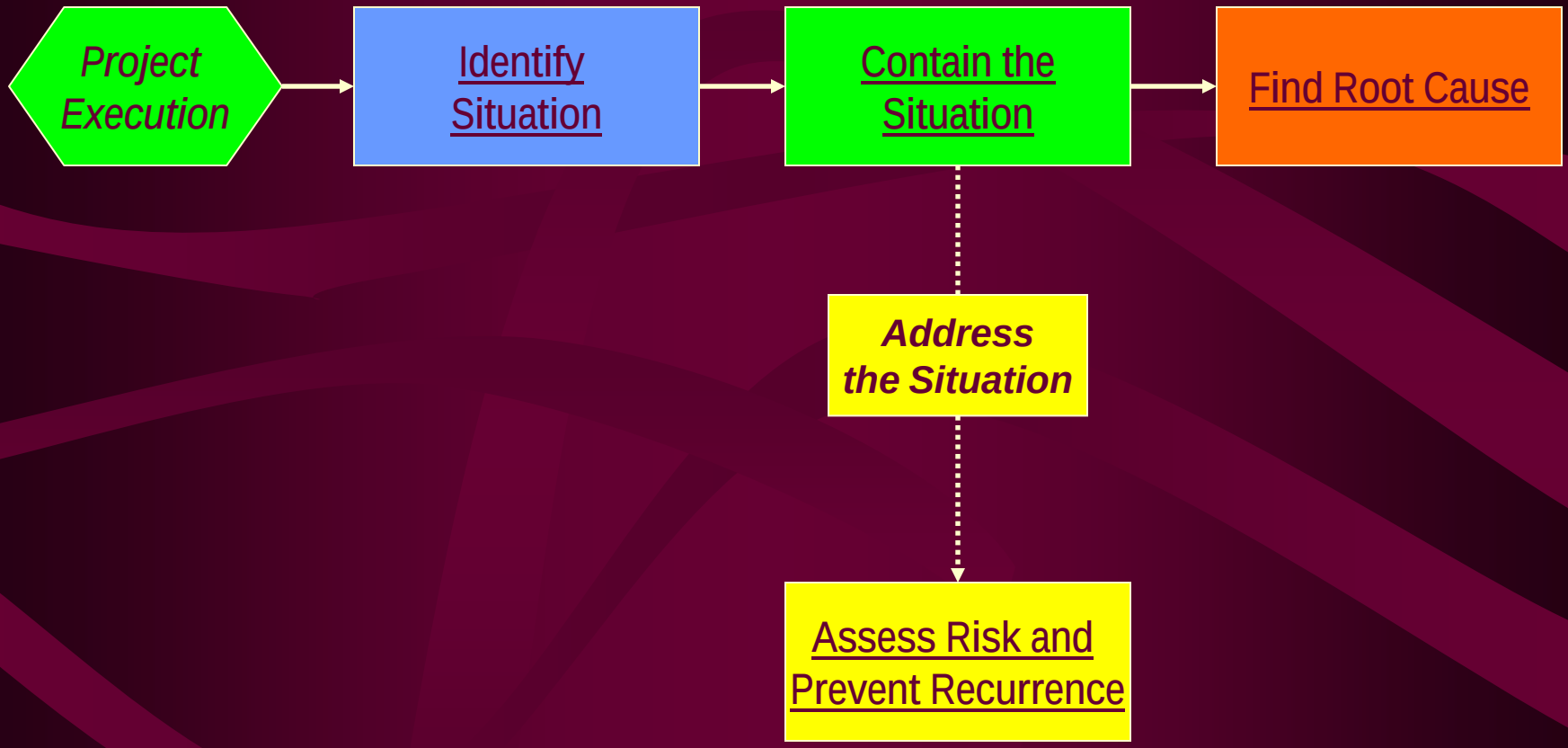
Resolving Project Issues



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Processes and Tools continued

Find Cause

Describe the Symptoms,

Analyze for Cause, and

Verify the Findings

- ✓ Root Cause Analysis, Fault-Tree Analysis, Control Charts, Fishbone Diagrams, Histograms, Run Charts, Scatter Diagrams

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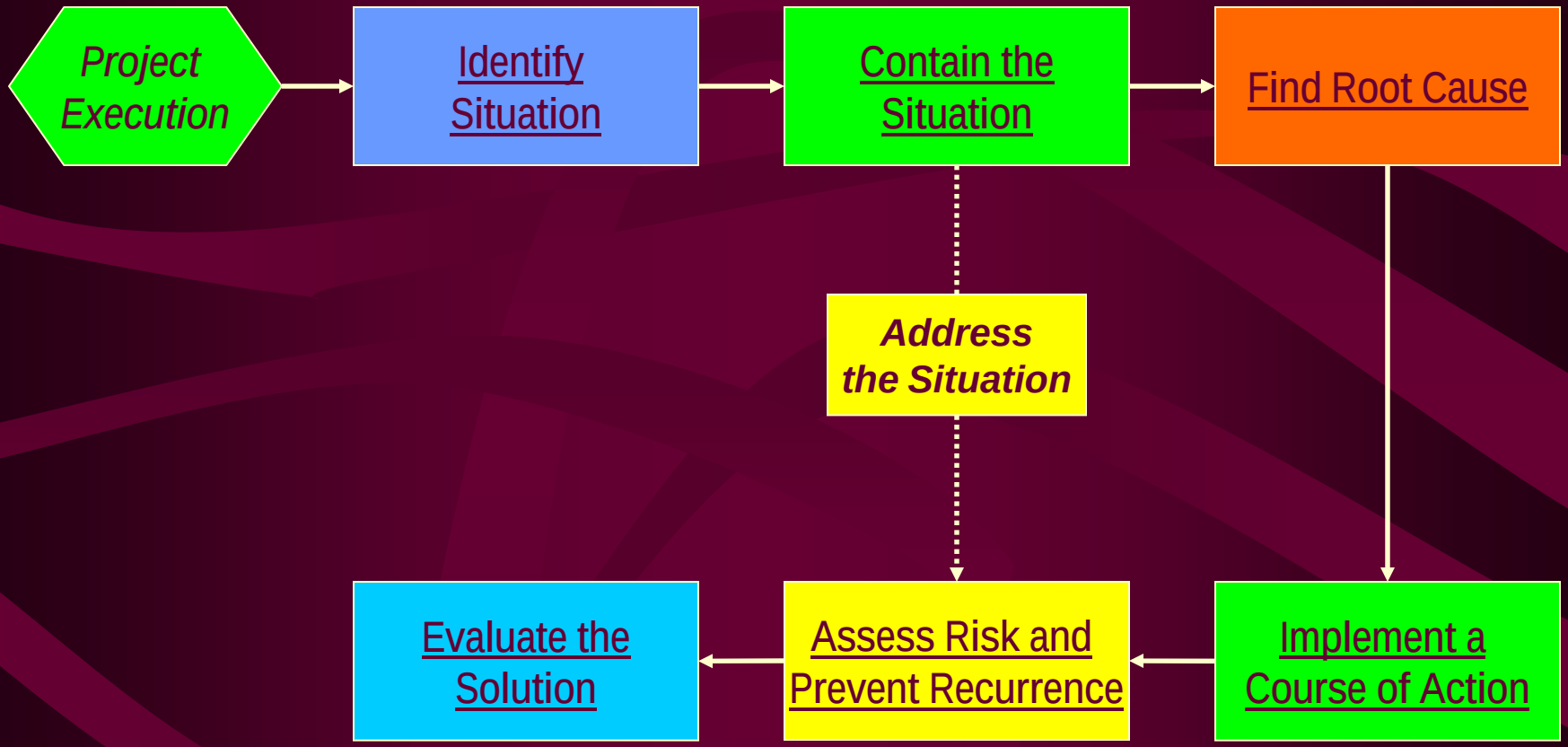
Resolving Project Issues



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Processes and Tools continued

Implement a Course of Action

Select Best Balance Between Benefit & Risk

- ✓ Decision Analysis, Design of Experiments, Process Flow Charts

Evaluate the Solution

Assess Action Taken & Optimize Success

- ✓ Opportunity – Benefit Analysis, Pareto Diagrams, Histograms

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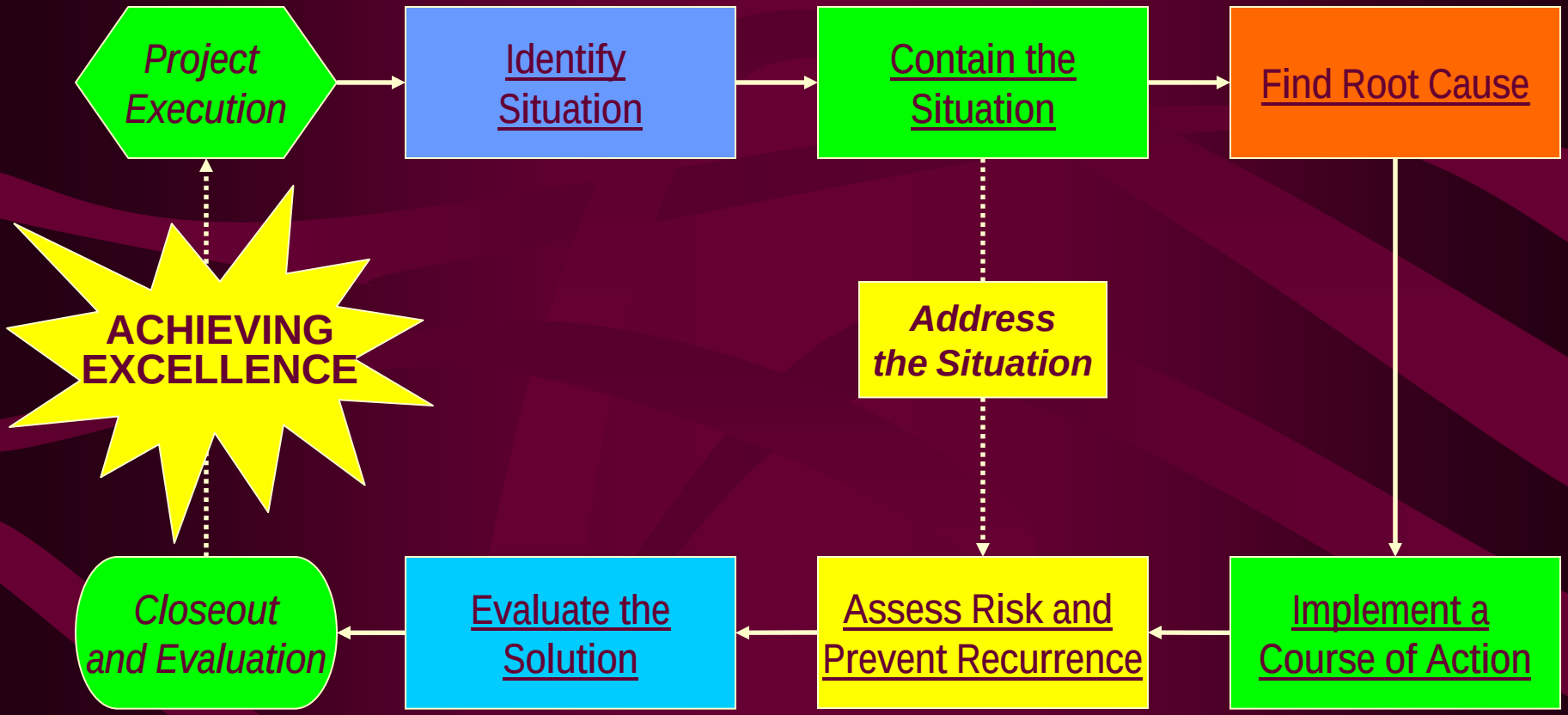
Resolving Project Issues



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Achieving Excellence in Execution
Summary

- Ensure the Right Project Environment
  - ✓ Process and task design
- Establish Project Measures and Accountabilities
  - ✓ What gets measured gets done; who gets measured performs
- Provide a Communications Channel for Process and Task Coaching & Feedback
  - ✓ Formal & informal performance discussions; status reporting
- Capture and Document Project Issues and Resolution Strategies
  - ✓ Lessons learned & a PM knowledge management system

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